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Hai Dang and **Ratnasingham Shivaji*** (r_shivaj@uncg.edu), Dept of Mathematics & Statistics, University of North Carolina at Greensboro, 116 Petty, 317 College Ave, Greensboro, NC 27412. *On radial solutions for singular combined superlinear elliptic systems on annular domains.*

We prove the existence of a large positive solution to the system

$$\begin{cases} -(r^{N-1}\phi_1(u'))' = \lambda r^{N-1}f_1(v), & a < r < b, \\ -(r^{N-1}\phi_2(v'))' = \lambda r^{N-1}f_2(u), & a < r < b, \\ u(a) = 0 = u(b), v(a) = 0 = v(b), \end{cases}$$

where $a > 0$, λ is a small positive parameter, $f_i : (0, \infty) \rightarrow \mathbb{R}$ are continuous and $\lim_{z \rightarrow \infty} \frac{\phi_1^{-1}(f_1(c(\phi_2^{-1}(f_2(z))))}{z} = \infty$ for all $c > 0$. (Received September 12, 2016)